# DESCRIPTIONS OF THREE NEW NORTH AMERICAN SPECIES OF THE MYMARID GENUS POLYNEMA HALIDAY PARASITIC ON MEMBRACID EGGS, WITH A LIST OF THE SPECIES DESCRIBED SINCE THE YEAR 1898.

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The following isolated descriptions are published in order to enable the names of the species to be used in forthcoming entomological publications and also to establish a species whose status has been that of a *nomen nudum*.

## 1. Polynema striaticorne, new species.

Normal position.

Female.—Length, 1.64 mm.; comparatively robust and large. Normal in size for the genus; easily visible to the unaided eye.

General color reddish brown to blackish, including the coxe, femora and tibiæ; scape, pedicel, three proximal tarsal joints, base and apex of the tibiæ, base of the femora and the trochanters honey yellow and also the abdominal petiole; first funicle joint with some yellowish; distal six joints of the antennæ and distal tarsal joint dusky black; venation yellowish brown, the marginal vein longer than wide but normal for the genus, darker. Wings hyaline. Color variable.

Fore wings moderately densely ciliate in the disk, the discal cilia moderately fine and strong, about twenty longitudinal lines across the widest portion of the wing; the marginal cilia beyond the distal half of the wing long, about five eighths the length of the greatest width of the wing, the apex of the wing regularly rounded, its greatest width at about the distal fourth; long, graceful. Marginal cilia of the posterior wing (caudal margin) more than twice longer than the wing is wide, at least twice the size of the cilia of the cephalic margin, the disk of the wing with no cilia excepting along each margin: along the cephalic margin, excluding the marginal cilia, there is a double or paired line running the length of the distal two thirds of the wing, along with the marginal cilia, but gradually disappearing proximad, beyond the marginal cilia and before attaining the venation; along the caudal margin the outer (caudal) line does not appear until the distal third of the wing is reached and proximad the other line begins to disappear sooner than the marginal cilia. Abdomen conicovate to conical, about equal to the combined length of the head and thorax or somewhat longer, the ovipositor barely exserted. Marginal vein with two distinct notches in its cephalic margin.

Vertex delicately reticulated, face nearly polished. Scutellum with the

usual curved, transverse line of foveæ at distal two thirds and at its base a transverse line of slightly elongated foveæ along the division between the scutum and the scutellum. Mesoscutum and scutellum with barely perceptible sculpture but present as fine polygonal figurations.

Antennæ 9-jointed, apparently naked but under high power (one sixth inch objective) a few scattered setæ are present; hispid as in maculipes Ashmead when unmounted. The scape is ovate, widest at distal third, slightly longer than the pedicel and first funicle joint combined but not more than three fourths the length of the abdominal petiole, slightly longer than joint 3 of the funicle; pedicel shorter, slightly more robust, subpyriform, a third longer than the following joint; the latter (joint 1 of funicle) distinctly the shortest antennal joint, cylindrical, a third the length of funicle joint 2 or 3; joints 2 and 3 of the funicle subequal, distinctly the longest funicle joints, joint 2 slightly longer than 3, both cylindrical and subequal in length to the scape but much slenderer and distinctly shorter than the club and but a fourth as wide; funicle joint 4 shortened and very slightly thickened, but two thirds the length of joint 3 and slightly shorter than joint 5; the latter more thickened, slightly longer, rectangular, subequal in length to joint 6 of the funicle and about a third wider than joint 3 or 4; the distal or sixth funicle joint is no longer but wider, ellipticalovate, not quite half as wide as the greatest width of the club but of nearly the same shape, not quite as wide as the scape; club forming an enlarged ovate mass which is slightly longer than the combined lengths of funicle joints 5 and 6. distinctly the largest antennal joint; undivided; along its sides and extending from the apex proximad are a few short, longitudinal grooves, very conspicuous in the shape of striæ on all male antennal joints excepting the scape and funicle.

Proximal joint of the tarsi of the caudal legs long and slender, subequal to the combined lengths of the three distal joints, which are all subequal, the third joint somewhat shorter than the second, the second joint somewhat the longest of the three.

(From 12 specimens, two thirds inch objective, one inch optic, Bausch and Lomb.)

Malc .- Length, 0.982 mm.

The same but more graceful, somewhat darker; third tarsal joints with some dusky; scape concolorous with the funicle, dusky black, the pedicel alone being honey yellow; first and second joints of the caudal tarsi somewhat longer in relation to the others; proximal joint of the cephalic tarsi at base ventrad with a few stiff bristles forming the strigil with the curved and forked cephalic tibial spur.

Abdomen (lateral aspect) hemispherical to ovate, flat ventrad, convex dorsad, no longer than the thorax.

Antennæ 13-jointed, the funicle filiform and loosely jointed, all of its joints distinctly longer than wide, cylindrical and subequal, very gradually shortening distad, joints 2, 3, 4, 5, 6, 7 and 8 about equal and longest, the proximal joint and joint 9 slightly shorter: joints 10 and 11 of the funicle each slightly shorter than the one preceding, joint 11 or the club shortest of the funicle

joints, about a fourth shorter than any of the joints from 2 to 8. Pubescence or clothing inconspicuous; funicle joints distinctly, uniformly longitudinally ribbed or striate and the disto-lateral angle of each is subacute, the distal ends truncate, the proximal ends slightly narrowed and then truncate. Pedicel gourd-shaped, truncate distad, then convexly swollen, then proximad, ending in a neck; pedicel slightly more than half the length of the first funicle joint; scape short, not very much longer than the pedicel and dilated ventrad to the width of the pedicel. Antennæ longer than the body.

(From 6 specimens, two thirds inch objective, one inch optic, Bausch and Lomb.)

A large and graceful species with long wings and closely resembling in some respects *Polynema howardii* (Ashmead), but the fore wings are somewhat more finely ciliated (about 20 lines of cilia instead of about 18); they are somewhat broader, especially as noted in regard to their proportionate length to the longest marginal cilia, their caudal margins are convex instead of nearly straight and the antennal joints of the male are distinctly longer and more slender (the female of *howardii* is unknown). The species is so different from *maculipes* Ashmead, also of which the male only is known, that particular differences will not be mentioned here other than to state that the fore wings are very much larger and more densely ciliated, the discal ciliation of the fore wings in *maculipes* being very coarse, the wings themselves narrow.

Described from the following series of specimens:

I. Two balsam slides from Dr. E. P. Felt, State Entomologist, Albany, N. Y., through Mr. C. T. Brues under date of March 3, 1909, thus—a male specimen on one slide labelled "a 1695, Aug. 31, 1907, Albany, N. Y."; and a female specimen on the other slide labelled "a 1101 xx. Alb. May 12, 1906." Under date of October 11, 1910, Dr. Felt stated in a letter concerning these specimens—"a 1695 was obtained from clover heads infested with the clover midge, Dasyncura leguminicola Lintu, taken in the vicinity of Albany, N. Y. The female mounted on the slide labelled a 1101 was undoubtedly reared from a jar containing galls of Rhabdophaga triticoides Walsh on Salix cordifolia taken in the vicinity of Albany, N. Y." Accordingly, the host relations here are obscure.

II. A collection of 3 males and 10 females on tags received from Mr. H. E. Hodgkiss, N. Y. Agricultural Experiment Station, Geneva, N. Y., through the National Bureau of Entomology and all labelled

"Membracid eggs. Apr. 30, 1908. Coll. N. Y. Exper. Sta." Also four slides from the same source bearing 2 males and 2 females labelled "N. Y. Agr. Exp. Sta. Parasite on pear membracid, *C. taurina* Fitch" and respectively "4/26/05. Geneva, N. Y. On eggs," the 2 males, and "4/26/05", "5/11/05. Kept 2 wks.", the females.

III. Two tag-mounted specimens, male and female, in the United States National Museum collection, labelled "Par. on eggs Ceresa bubalus. 4/20, '93. From Miss Murtfeldt," and in Ashmead's handwriting "Cosmocoma maculipes Ashmead." Also in the same collection another male specimen bearing the label "1129 Po. On Ceresa. Issued May 5, '92."

IV. A single male mounted in balsam, captured in a greenhouse, Urbana, Illinois, October 8, 1910.

Parasitic therefore on the eggs of Ceresa bubalus Fabricius and Ceresa taurina Fitch.

Habitat.—United States—New York (Albany, Geneva); Missouri (various localities); Illinois (Urbana).

In the literature this species is the Cosmocoma referred to by Marlatt\* which destroyed the eggs received by Miss Murtfeldt from various localities in Missouri; also Riley† refers to the same species as a parasite of the *Ceresa*, but without giving other data.

Types.—Type No. 13,451, United State National Museum, Washington, D. C., 1 &, 1 \, in balsam, 2 slides (the 2 specimens of series I in preceding, N. Y.).

Cotypes.—Accession No. 44,176, Illinois State Laboratory of Natural History, Urbana, Illinois, I slide bearing I &, I &, in xylol-balsam (2 of the specimens of series II in preceding).

# 2. Polynema enchenopæ, new species.

Normal position.

Female.—Length, I mm.; smaller than the preceding, moderate in size for the genus.

Similar in general to the preceding but differing notably in the relative length of the third to the second funicle joint, here the former distinctly shorter, and in the coarser discal ciliation of the fore wings and the lesser width of the latter. More closely allied with maculipes Ashmead.

\* Insect Life, U. S. Department of Agriculture, Washington, D. C., VII (1894–1895), 1895, pp. 12-13.

† Report Ent. in Report Secy. Agric. 1893, U. S. Department of Agriculture, Washington, D. C., 1894, p. 215.

General color variable, dilute brownish black; scape, pedicel, caudal coxæ, trochanters, three proximal tarsal joints and the cephalic tibiæ pallid yellowish; flagellum of the antennæ, cephalic and intermediate coxæ, femora, intermediate and caudal tibiæ and the venation dusky black, the club joint darker. Wings hyaline, excepting the slightly clouded middle portion of the posterior wings. Abdominal petiole yellowish brown to yellow. Eyes reddish, ocelli pink. Gular surfaces yellow. Abdomen reddish brown, smooth, shining, impunctate.

Fore wings in general as in the preceding species but decidedly more slender and the discal cilia are distinctly stronger and coarser, coarse, less dense, being about half as many in a transverse row across the widest part of the wing (about 11 to 12 longitudinal lines, counted from one margin to the other); posterior wings, however, as in the preceding species but the two lines of discal cilia near the margins are less distinctly paired.

Abdomen conic-ovate, longer than the combined length of the head and thorax, the hypopygium extending somewhat beyond the apex but the ovipositor not at all exserted. Legs as in the preceding species. Tibial spurs all single, the intermediate ones smallest, the cephalic ones long, comparatively stout and forked at its tip, forming a strigil with the longitudinal row of brush-like bristles along the ventral aspect of the proximal joint of the cephalic tarsi. Ventrad of the antennal bulbs, the face bears sparse hispid pubescence, the antennal bulbs widely separated, thrice the distance from each other than each is from the respective eye margin. Head (cephalic aspect) triangular, the face concave, margined laterad but the cheeks rounded. Eyes ovate. Parapsidal furrows distinct, complete, short, curved. Vertex broad but declivous cephalad of the cephalic ocellus, just caudad of that ocellus, acute transversely; ocelli in an obtuse angled triangle on the caudal half of the vertex, the lateral ones near the occipital margin, not near the eye margins, but nearly thrice farther separated from each other than each is separated from the eye margin and nearly twice the distance apart than each is from the cephalic ocellus, the latter about in the center of the vertex. Lateral margin of the eye slightly concave. The "vertexal carina" present (cephalic aspect), apparently a transverse grooved line along the cephalic margin of the vertex, abruptly changing angle laterad and proceeding obliquely caudo-laterad along the eye margin and then (dorsal aspect) at the caudo-mesal angle of the eye, changing angle, proceeding obliquely caudo-mesad to the occipital margin where it is lost (caudal aspect), apparently, however, in the foraminal depression curving convexly, caudo-ventrad or beyond the occipital margin, curving around to join the corresponding part on the opposite side and thus forming one continuous groove. This groove separates the lateral ocelli from the eye margins. (Dorsal aspect), occipital and cephalic margins of the vertex concave, the head longer (axially or cephalo-caudad) at the lateral margin by about a fourth, than at the meson, wide behind the eyes, the face scooped out between the eyes. Body very faintly sculptured, practically smooth. Scutellum hemispherical, smooth, at its caudal (apical, distal) fifth, following the apical margin of the sclerite is a convexly curved line of uniformly round dot-like punctures or foveæ. Metathoracic spiracles minute, circular, margined, no sulcus; metathorax polished, with no carinæ. Legs hairy, especially the tibiæ.

Abdomen smooth, dorsad the caudal margins of the segments straight, segment 2 largest along the meson, twice the length of segment 3, segments 3 and 5 subequal, 3 widest, segments 4 and 6 subequal, slightly shorter; 7 distinctly longer, frustrum-like, segment 8 small, conic. Pronotum narrowed at the meson and grooved there, the mesoscutum acutely produced at the meson. Apical margin of the clypeus concave.

Antennæ inserted slightly above the middle of the face but not half-way up the eye margins, yet distinctly dorsad of an imaginary line drawn between the ventral ends of the eyes. They have the same general shape as in the preceding species, the principal difference being in the shorter third funicle joint which is not long and subequal to the second joint of the funicle but only two thirds the latter's length; the scape also differs in being dilated ventrad and of shorter length, its dorsal margin flat or straight, slightly longer than joint 2 of the funicle and distinctly longer than the pedicel and joint 1 of the funicle combined; pedicel subglobate, with a slight neck proximad, not quite as wide as the greatest width of the scape but at least thrice wider than the proximal funicle joint and a fourth longer; the funicle cylindrical, enlarging slightly distad, the six joints all longer than wide and unequal, joint 1 cylindrical, slightly widened distad, shortest, slightly over a third of the length of joint 2; joints 1-3 filiform, equal in width; joint 2 longest, slender, subequal to the scape and three fourths the length of the club joint; joints 3-6 subequal in length, after 3 gradually enlarging; of the four joints 3 and 6 are about equal in length, slightly longer than either 4 or 5, joint 6 distinctly thicker than the others but not abruptly so, ovate, distinctly less than half the length of the large club joint and about a third of its width; joints 4 and 5 distinctly wider than joints 1-3. Club undivided, the largest antennal joint, ovate, equal in length to the three distal (4, 5, 6) funicle joints but not half as long by far as the funicle taken as a whole; with some longitudinal grooves or striæ near apex. Antennæ more hairy than in the preceding species but not noticeably so, the clothing pilose and moderately loose, moderately close on the club.

(From 10 specimens, two thirds inch objective, one inch optic, Bausch and Lomb.)

Male.—Length, 1 mm., more or less, slightly shorter than the female.

The same, more graceful; two proximal joints of the antennal funicle with some yellowish. (Lateral aspect), abdomen ovate, the body of it about equal to the thorax in length, its petiole longer than the proximal funicle joint.

Antennæ somewhat similar to those of this sex in *striaticorne* but the joints are relatively shorter, less distinctly striated longitudinally, though traces of such sculpture are perceptible; the funicle joints are all cylindrical, much longer than wide and subequal in length and sparsely hispid. Funicle joints 4 to 10, inclusive, about equal, the distal or eleventh joint (club) about a fourth shorter, the proximal three joints of the funicle slightly longer, a third longer than the distal joints; scape short, compressed, dilated ventrad, distinctly longer than the pedicel and somewhat shorter than the proximal

funicle joint; pedicel subglobose, (lateral aspect) dilated ventrad, slightly convex dorsad, compressed, with a short, slightly curved proximal neck, slightly more than a half the length of the proximal funicle joint but much wider, its greatest width about equal to that of the scape (dorso-ventrad).

(From 7 specimens, two thirds inch objective, one inch optic, Bausch and Lomb.)

Described from 7 males and 10 females reared from the eggmasses of the membracid *Euchenopa binotata* (Say) at Chicago, Illinois, September 15, 1908 (J. J. Davis). The eggs of the host were on *Ptelea*.

More closely related than the preceding to maculipes Ashmead and howardii Ashmead, differing from the former (male type) in having relatively finer discal ciliation of the fore wings (about 12 lines, maculipes but 10), in the broader fore wings, in maculipes the longest marginal cilia of those wings being seven eighths the greatest wing width, but in this species only about three fourths and in the general coloration of the legs. From the species howardii Ashmead in having distinctly coarser discal ciliation of the fore wings and in different wing shape; also in different coloration of the antennæ. A moderate sized species.

Habitat.—United States—Illinois (Chicago).

Types.—Type No. 13,452, United States National Museum, Washington, D. C., 2 &'s, 2 &'s in xylol-balsam (1 slide; part of cotype).

Cotype.—Accession No. 40,020, Illinois State Laboratory of Natural History, Urbana, 1 slide, 2 &'s, 3 \( \frac{9}{5}'s \) in xylol-balsam.

As stated, the foregoing two species are related to maculipes Ashmead and howardii Ashmead, whose identities are considerably mixed in the Ashmead determinations (in the U. S. N. M. collection for instance); from all others of this country and of those described since de Dalla Torre's catalogue, easily distinguished. From piccipes Girault by the longer distal funicle joints of the female antennæ and the wider fore wings; reduvioli Perkins by the short proximal funicle joints; hawaiiense Ashmead by the shorter antennal joints; needhami Ashmead, brasiliense Ashmead, grenadense Ashmead, and albicoxa Ashmead by the lack of an exserted ovipositor; magniceps Ashmead by thoracic characters and from bergi Ashmead and rufescens Ashmead by having hyaline wings and in being black in color, respectively.

### 3. Polynema citripes Ashmead, mss.\*

Polyneura citripes Ashmead—Webster, 1903, p. 33.†
Polynema citripes Ashmead—Girault, 1907, pp. 28, 32.‡
Polynema citripes Ashmead—Girault, 1907, p. 106.§

This species has never been described but as may be inferred has been mentioned several times in the literature of economic entomology. I describe it so that the name will not be lost.

Normal position.

Female.—Length, 0.75 mm.; small for the genus but visible to naked eye. General color dusky black, the whole of the legs excepting the distal tarsal joints and the antennæ excepting the enlarged club! pallid to lemon yellow; distal tarsal joints and antennal club concolorous with the general body color; distal three funicle joints and the cephalic coxæ with some tinges of dusky on one aspect; venation pallid to dusky; wings wholly hyaline. Eyes dark. Abdominal petiole concolorous with the legs.

Fore wings narrow and graceful, their proximal half slender, the blade not enlarging until the end of that half is reached when it gradually enlarges to the shape of a slender paddle, the longest marginal fringes distinctly longer than the greatest wing width, at least by a fourth, long and slender, the wing blade obtusely pointed, the apex dome-shaped, the wing from 7 to 8 times longer than broad, with moderately dense, moderately fine discal ciliation (about 9 lines but varying occasionally to only 5), which disappears proximad some distance out from the marginal vein; marginal fringes comparatively long, marginal vein bearing 2 setæ from its surface, normal. Posterior wings narrow, straight, slender, linear, the marginal fringes of the posterior margin long and slender, the longest of them 5 or 6 times longer than the wing is wide but by far not half so long as the longest fringes of the fore wing, those of the cephalic margin moderately short, delicate, inconspicuous, slightly longer than the wing is wide. Discal ciliation of the posterior wing sparse, apparently irregular, apparently 'a single line of long, slender setæ, far apart and alternating from one margin to the other but actually consisting of a single line of long cilia along each margin; posterior wings with a dusky appearance but really clear.

Tarsi 4-jointed, the proximal joint of the posterior tarsi longest but somewhat shorter than the combined lengths of the distal three joints, more than twice the length of the second joint, the other three joints subequal; the proximal joints of the intermediate and cephalic tarsi shorter in relation to

\* As I shall show elsewhere, this species is the *Ooctonus longipes* of Ashmead, Canadian Ent., XIX, 1887, p. 192. Thus, the name will have to be *Polynema longipes* (Ashmead).

† Bull. No. 42, Division Ent., U. S. Dept. Agric., Washington, D. C.

‡ Psyche, Boston, Mass., XIV.

\$ 1b., XVI.

|| The whole of the funicle varying to dusky black.

the combined lengths of the distal three joints, about one and three quarters times the lengths of the second joints, that of the cephalic tarsus somewhat longer, bent at its proximal third, the hairs on its ventral surface forming a strigil with the curved, forked tibial spur of the cephalic tibia; the times of the fork of the latter are unequal. Cephalic tibia and femora subequal in length, the tibia of the other legs longer than the femora. Caudal coxa more elongate-conical than those of the other legs, which are somewhat globular. Tibial spurs single.

Lateral ocelli somewhat their own width from the respective eye margins, farther apart from each other than each is from the cephalic ocellus.

Sculpture of the body not conspicuous, apparently absent, the abdomen smooth, the scutellum with the usual transverse line of minute foveæ near its tip, curving with the margin at that point, the metanotum comparatively simple, apparently without carinæ: parapsidal furrows distinct, complete; along the median line the scutellum and mesoscutum are subequal, the posterior margin of the latter nearly straight, slightly convexed. Metathoracic spiracle minute, like a point, round. Vertexal carina present, complete. Abdomen conic-ovate, the ovipositor slightly exserted, or rather its valves.

Antennæ widely separated, inserted near the margins of the eyes, 9-jointed, the funicle nearly filiform, ending in a very large, solid, ovate club joint; pubescence not conspicuous. Scape dilated ventrad, longer than the pedicel and wider, subequal in length to the second funicle joint. Pedicel obconic, subequal in length to the proximal funicle joint but much wider and slightly longer. First three funicle joints equal in width, slender, cylindrical, the first and second long or moderately long, the third short; first funicle joint twice the length of the fourth, which is the shortest funicle joint, but only two thirds the length of the second joint which is the longest funicle joint, slightly curved, over twice the length of the short third joint of the funicle and about thrice the length of the fourth; third joint longer than wide but abruptly shorter, about a fourth longer than the fourth joint; the latter shortest yet longer than wide, slightly wider, ovate-quadrate; fifth and sixth joints cylindrical oval, each lengthening slightly, the third joint intermediate in length between them. Club abruptly very large, as long as the combined lengths of the first two funicle joints. The club with several conspicuous, short, longitudinal grooves along the side of one aspect and also leading from the apex. In unmounted specimens the antennæ nearly hispid, with short, whitish hairs.

(From 10 specimens, two thirds inch objective, one inch optic, Bausch and Lomb.)

Male.—The same but having the pallid yellow of the legs dusky yellow, the antennæ dusky black excepting the pallid yellow scape and pedicel; and moreover differing in the shorter, more rounded abdomen, the lesser number of lines of discal ciliation of the fore wing (4 or 5 lines)\* and in the longer, filiform, slender antennæ.

Antennæ 13-jointed, normal, the pubescence moderately sparse, the longitudinal striæ of the funicle joints (2-10) visible but not conspicuous, the distal

<sup>\*</sup> But in one specimen only.

angles of those funicle joints acute; scape equal to the pedicel and proximal funicle joint combined, more slender than in the female; pedicel obconic, subequal in length to the following joint or slightly shorter, wider than the scape; funicle joints all about equal in length and width but slightly lengthening distad, 9 and 10 longest; in regard to the former, joints 3 to 10 subequal, the second joint somewhat shorter and the first shorter still, about a fifth shorter than joint 3; club joint long-ovate, equal to funicle joint 2, hence shorter than joint 10 of the funicle. Petiole of abdomen as long or longer than the caudal coxæ.

(From 2 specimens, two thirds inch objective, one inch optic, Bausch and Lomb.)

Described from the following specimens: One slide labelled "W. 1892.4 F. M. Webster. Wooster, Ohio; Urbana, Illinois. Reared with E. cragrostidis. (1) Oligosita americana Ashm. (2) Polynema citripes Ashm." and bearing I d, I a of the latter and two pairs of an undescribed species of Westwoodella; original material; names in Ashmead's handwriting. One male and two females, formerly tagmounted, now remounted in xylol-balsam (1 slide), from the U. S. National Museum collection, labelled "Bred from Eurytomocharis eragrostidis. Urbana, Illinois, F. M. Wester," arranged in the collection with the following specimen. One female from the same collection and similarly remounted bearing the labels in the late Dr. Ashmead's hand, "Cosmocoma citripes Ashm. Type", "Type" and "Ind.," evidently original material but not type material as the label was yellow, not red, like those used by the National Museum, and the specimen bore no number and is not entered in the catalogue of types. One slide bearing two females received for identification from Dr. L. O. Howard, labelled "collected with Thrips on carnations from Nashville, Tenn. 9-12-09. H. F. Wilson." Designated as homotypes. Three females on a slide with other miscellaneous mymarids labelled "Urbana, Illinois, July 1, 1910, sweeping. Girault." Finally, a slide bearing a single female labelled "Polynema citripes Ashmead. Centralia, Illinois, window, August 25, 1909. Girault." Homotype.

Habitat.—United States—Illinois (Urbana, Centralia); Indiana; Tennessee (Nashville); Ohio (Wooster); Florida.

Homotypes.—Cat. No. 13.453, United States National Museum, Washington, D. C., 2 2's in xylol-balsam, 1 slide. (Nashville, Tenn. See preceding.) Accession No. 44,175, Illinois State Laboratory of

Natural History, Urbana, Illinois, 1 \( \text{p} in xylol-balsam, 1 \) slide. (Centralia, Illinois, 25 August, 1909. See preceding list of specimens.)

A species unique in having the slender wings and the long marginal cilia of the fore wings distinctly longer than the greatest width of those wings. By this characteristic alone it is easily separated from all other described species of the genus. Common in Illinois and probably parasitic on jassid eggs in wheat straw (Dorycephalus platyrhynchus Osborn?). Consult the analogous case of Westwood-clla americana in the reference to Girault, 1909, given on a preceding page, though Webster (1. c.) regarded it as a probable parasite of Isosoma hordei (Harris).

The following list of species has been described\* since Dalla Torre's catalogue (1898) and brings his list up to date:

1. Polynema maculipes (Ashmead).

Cosmocoma maculipes Ashmead.

Canadian Ent., XIX, 1887, p. 3. (U. S.) (Not listed by de Dalla Torre.)

2. Polynema magniceps Ashmead.

Transactions Ent. Soc. London f. 1900, pp. 265-266. (Grenada.)

3. Polynema grenadense Ashmead.

Ibidem, p. 266. (Grenada.)

4. Polynema albicoxa Ashmead.

Ibidem, p. 266. (Grenada.)

5. Polynema needhami Ashmead. Ent. News, XI, 1900, p. 617. (U. S.)

6. Polynema hawaiiense Ashmead.

Fauna Hawaiiensis, 1901, I, pt. iii, p. 332. (Hawaii.)

7. Polynema brasiliense Ashmead.

Memoirs Carnegie Museum, I, 1904, p. 521. (Brazil.)

8. Polynema rufescens Ashmead.

Ibidem. (Brazil.)

9. Polynema bergi Ashmead.

Ent. News, XVI. 1905, p. 214. (Russian Turkestan.)

10. Polynema picipes Girault.

Psyche, XII, 1905, pp. 91–92. (U. S.)

Polynema piceipes Girault (nom. emend.).

11. Polynema reduvioli Perkins.

Bull. No. 1, Division Ent., Hawaiian Sugar Planters' Association, 1905, pp. 196–197, plate XII, figs. 3, 3a; XIII, fig. 7. (Hawaii.)

\* There is also a nomen nudum, Polynema citrifes Ashmead, now known to be P. longipes Ashmead. (See preceding.)

### 12. Polynema bifasciatipenne (Girault).

Stichothrix bifasciatipennis Girault.
Psyche, XV, 1908, pp. 115-117. (U. S.)

A large number of the species of this genus are poorly described; as a matter of fact it is difficult to distinguish the species in this genus without mounting them in balsam and studying the characters afforded by the fore wings, their relative shape and size and the amount and quality of their discal ciliation; there are also other good sculptural characters on the metathorax, but coloration is too variable for specific characters in most instances.

# DESCRIPTIONS OF SOME NEW HEMIPTERA-HETEROPTERA.

By H. G. BARBER, ROSELLE PARK, N. J.

### Jalysus elongatus, new species.

Longer than J. spinosus Say, pale ochraceous in color. Head twice as long as broad, armed at vertex with a long, acute, cylindrical spine which usually projects horizontally beyond apex of head. This spine in a few cases is deflexed at apex. Post-ocular part of head much longer than in spinosus, as long as the width of the anterior margin of the pronotum; area back of the transverse groove smooth; a longitudinal, smooth, callosed line just above the eyes. Head beneath with a series of fine punctures beside the buccal groove and with a smooth pale-yellow, callosed line running from beneath the eyes to the anterior edge of the pronotum, suffused with a light piceous streak either side of this line. First joint of rostrum three fourths as long as head. Antennæ similar in character and color to spinosus but with the apical joint relatively narrower. Pronotum over twice as long as wide, closely and coarsely punctate dorsally and laterally except on the two oval cicatrices and on the three longitudinal callosed ridges which are arranged as follows: lateral ones, distinct from anterior margin to rounded humeral elevations, median carina not elevated behind, evanescent before posterior declivity. Spine of scutellum depressed, almost horizontal. Clavus and subclaval area of hemelytra punctate, these verging posteriorly into shallow areoles; remainder of hemelytra and membrane transversely rugulose between the prominent nervures and there subhyaline. Very acute and prolonged apex of corium reaching well beyond middle of membrane, not tipped with black. Abdomen beneath impunctate, unicolorous in Q and reddish brown in d. Pleural pieces of meso- and metasternum coarsely and closely punctate. Metapleural spines relatively shorter